What is claimed is:

1. An operation instructing device comprising:

an area setting unit operable to set a movement detection area for a specific user, based on motion values resulting from movements unique to the user; and

an operation unit operable to activate the area setting unit in response to an operation by the user.

2. An operation instructing device according to Claim 1, included in a portable apparatus, further comprising:

an instructing unit operable, when in a setting mode, to instruct a plurality of movements, the setting mode being a state in which the area setting unit is activated;

a detecting unit operable to detect, for each of the instructed movements, motion values of the portable apparatus that result from user movements in accordance with the instructed movements; and

an assigning unit operable to assign each of a plurality of operation instructions relating to a function of the portable apparatus to different sub areas of the movement detection area.

3. An operation instructing device according to Claim 2, wherein

the instructed movements are repeated a number of times, and include shaking movements of a strong strength and a weak strength in directions that are positive and negative along each of three axes of a three-dimensional space,

the detecting unit is a three-dimensional acceleration sensor, and

the area setting unit includes:

an average value calculating subunit operable to store, for each time that each shaking movement is repeated, a maximum value of acceleration values detected by the sensor within a predetermined time period, and to calculate an average value for each shaking movement in each direction from the stored maximum values;

a threshold calculating subunit operable to calculate, using an equation, lower and upper thresholds for each direction, based on the calculated average values for the weak and strong shaking movements in the direction; and

a setting subunit operable to set the range between the lower and upper thresholds in each direction as one of the sub areas of the movement detection area.

4. An operation instructing device according to Claim 3, further comprising:

a judging unit operable to judge, when in a mode other than the setting mode, within which sub area each motion value detected by the detecting unit falls; and

an instruction outputting unit operable to output, to the portable apparatus, the operation instruction assigned to the sub area within which the detected motion value is judged to fall.

5. An operation instructing device according to Claim 4, further comprising:

an updating unit operable, when the motion value deviates from any of the sub areas, and the deviation is less than a predetermined value, to shift lower and upper thresholds of the sub area by the amount of the deviation.

6. An operation instructing device according to Claim 3, wherein,

the threshold calculating unit uses equations:

$$\mathrm{LowTh} = \mathrm{AvMxAcc}(\mathrm{dir}, \mathrm{w}) - \frac{\mathrm{AvMxAcc}(\mathrm{dir}, \mathrm{s}) - \mathrm{AvMxAcc}(\mathrm{dir}, \mathrm{w})}{2}$$

and

$$\mathrm{UpTh} = \frac{\mathrm{AvMxAcc}(\mathrm{dir}, \mathrm{s}) + \mathrm{AvMxAcc}(\mathrm{dir}, \mathrm{w})}{2},$$

where "LowTh" indicates the lower threshold, "Upth" indicates the upper threshold, "AvMxAcc" indicates the average value of maximum acceleration values, "dir" indicates a direction in which the user performed the movement, "w" indicates a weak movement, and "s" indicates a strong movement.

7. An operation instructing device according to Claim 2, wherein

the assigning unit selects one of one-dimensional, two-dimensional, and three-dimensional movement detection areas, according to a total number and directions of the operation instructions, and assigns each of the operation instructions

to a sub area in a matching direction with a direction that the assigned operation instruction indicates.

8. An operation instructing device according to Claim 2, wherein

the detecting unit is a three-dimensional acceleration sensor, and

the area setting unit sets the movement detection area based on distances obtained by twice integrating acceleration values detected by the sensor.

9. An operation instructing device according to Claim 2, wherein

the detecting unit is a gyroscope, and

the assigning unit assigns each of the operation instructions to a different sub area, the operation instructions being for rotating a viewing direction of an image displayed on a screen of the portable apparatus, based on angular accelerations detected by the gyroscope.

10. An operation instructing method in which a sensor included in a portable apparatus detects motion values of the portable apparatus that result from user movements, the method comprising the steps of:

instructing a plurality of movements in a setting mode;

detecting, by the sensor, motion values of the portable apparatus that result from the user movements;

setting a movement detection area, based on motion values for each of the instructed movements;

assigning each of a plurality of operation instructions relating to a function of the portable apparatus to different sub areas of the movement detection area;

judging, when in a mode other than the setting mode, within which sub area the detected motion value falls; and

outputting, to the portable apparatus, the operation instruction assigned to the sub area within which the detected motion value is judged to fall.

11. An operation instructing program that executes an operation instructing method in which a sensor included in a portable apparatus detects motion values of the portable apparatus that result from user movements, the program comprising the steps of:

instructing a plurality of movements in a setting mode;

detecting, by the sensor, motion values of the portable apparatus that result from the user movements;

setting a movement detection area, based on motion values for each of the instructed movements;

assigning each of a plurality of operation instructions relating to a function of the portable apparatus to different sub areas of the movement detection area;

judging, when in a mode other than the setting mode, within which sub area the detected motion value falls; and

outputting, to the portable apparatus, the operation

instruction assigned to the sub area within which the detected motion value is judged to fall.